

What is claimed is:

1. A printer system for producing variable sized printed receiver media comprising:
- a receiver media handling system for an inkjet printer having an internal receiver media supply roll;
  - a printhead carriage for printing images within an image area on said receiver media from the supply roll; and
  - a post-print treatment station adapted to receive said variable sized printed receiver media.
2. The printer system according to Claim 1 wherein said receiver media handling system further comprises:
- a rotary drum having a tube-shaped outer surface with a plurality of cutter notches predisposed at predetermined locations;
  - a receiver media feeder for drawing receiver media from said supply roll and along said outer surface;
  - a lead edge clamp incorporated onto said rotary drum for retaining an edge of receiver media from said supply roll at a location about said rotary drum;
  - a retractable cutting blade for cutting receiver media at any one of said cutter notches; and
  - motorized means for causing said rotary drum to first rotate receiver media from said supply roll to a printing position and retract said receiver media to a cutting position following printing.
3. The printer system according to Claim 2 wherein said rotary drum is adapted to run counter-clockwise causing the cut receiver media to unload onto said post-print treatment station.

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~~4. The printer system according to Claim 2 further comprising at least one in-feed drive roller configured to engage onto said tube-shaped outer surface and push said receiver media from said receiver media supply roll to said lead edge clamp.~~

5. The printer system according to Claim 4 wherein said in-feed drive roller is configured to retract for printing.

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6. The printer system according to Claim 2 further comprising a means for retaining said receiver media from the supply roll in a printing position by tensioning said receiver media from the supply roll between said lead edge clamp and said receiver media supply roll.

7. The printer system according to Claim 2 further comprising a means for causing said rotary drum to return to a receiver media feed position to begin a new cycle.

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8. The printer system according to Claim 2 wherein the amounts of receiver media from said supply roll on said outer surface of said rotary drum is constant for all requested print formats.

9. The printer system according to Claim 2 further comprising a means for determining the location to cut said receiver media utilizing the image area for the current print job.

10. The printer system according to Claim 2 further comprising a stripper/in-feed guide configured to cause said cut receiver media to exit onto a post-print treatment station, such as a paper tray, a dryer section, or a laminator.

11. The printer system according to Claim 2 further comprising an outer guide shoe adapted to guide said receiver media from the supply roll toward said lead edge clamp.

12. The printer system according to Claim 1 wherein said printhead carriage is page-width.

13. The printer system according to Claim 2 wherein said printhead carriage is configured to translate across said rotary drum.

14. For an inkjet printer system having an internal receiver media supply roll and a printhead for printing images on receiver media from the supply roll, a receiver media handling system for producing variable sized printed receiver media comprising:

a drum having a tube-shaped outer surface with a plurality of cutter notches predisposed at predetermined locations;

a receiver media feeder for drawing receiver media from said supply roll and along said outer surface;

a clamp for retaining an edge of receiver media from said supply roll at a location about said drum;

a cutting blade for cutting receiver media at any one of said cutter notches; and

motorized means for causing said drum to first rotate receiver media from said supply roll to a printing position and retract said receiver media to a cutting position following printing.

15. The receiver media handling system according to Claim 14 wherein said drum is a rotary drum.

16. The receiver media handling system according to Claim 15 further comprising means for causing said rotary drum to rotate counter-clockwise so as to position the cut receiver media to exit.

17. The receiver media handling system according to Claim 15 further comprising a means for causing said rotary drum to return to a receiver media feed position upon unloading the cut receiver media through a designated exit.

18. The receiver media handling system according to Claim 15 wherein said clamp is a lead edge clamp incorporated onto said rotary drum.

19. The receiver media handling system according to Claim 18 further comprising means for retaining said receiver media from the supply roll in a printing position by tensioning said receiver media from the supply roll between said lead edge clamp and said receiver media supply roll.

20. The receiver media handling system according to Claim 18 further comprising an outer guide shoe adapted to guide said receiver media from the supply roll to said lead edge clamp.

21. The receiver media handling system according to Claim 17 further comprising at least one in-feed drive roller configured to engage onto said tube-shaped outer surface and push said receiver media from said receiver media supply roll to said lead edge clamp.

22. The receiver media handling system according to Claim 21 wherein said in-feed drive roller is configured to retract for printing.

23. The receiver media handling system according to Claim 14 wherein said cutting blade is a retractable cutting blade.

24. The receiver media handling system according to Claim 14 wherein said cutting blade is a rotary cutter wheel.

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25. The receiver media handling system according to Claim 24 wherein said rotating cutter wheel is configured to retract from said drum.

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26. The receiver media handling system according to Claim 14 further comprising a stripper/in-feed guide configured to cause said cut receiver media to exit onto a post-print treatment station, such as a paper tray, a dryer section, or a laminator.

27. For an inkjet printer including a rotary drum having a tube-shaped outer surface with a plurality of cutter notches predisposed at predetermined locations, an internal receiver media supply roll, and means for printing images on said receiver media from the supply roll, a method of accommodating flexible media format needs comprising the steps of:

drawing said receiver media from said supply roll and along said outer surface;

retaining an edge of said receiver media from said supply roll at a location about said rotary drum;

cutting said receiver media at any one of said cutter notches; and causing the cut receiver media to exit a receiver media path.

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28. The method according to Claim 27 wherein said drawing step further comprises the step of causing a retractable in-feed drive roller to come in contact with said outer surface.

29. The method according to Claim 28 wherein said step of causing a retractable in-feed drive roller to come in contact with said outer surface further includes the step of driving said receiver media around said rotary drum and out to a lead edge clamp.

30. The method according to Claim 29 wherein said driving step further includes the step of guiding said receiver media around the circumference of said rotary drum.

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31. The method according to Claim 27 wherein said retaining step further includes the step of defining an image area on said receiver media for printing.

32. The method according to Claim 27 wherein said retaining step is followed by the step of tensioning said receiver media around said rotary drum through said receiver media supply roll.

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33. The method according to Claim 32 wherein said tensioning step is followed by the step of activating said drum to speed.

34. The method according to Claim 33 wherein said activating step is followed by the step of translating a printhead carriage across said rotary drum for printing images on said receiver media within said image area.

35. The method according to Claim 34 wherein said translating step further includes the step of causing said printhead carriage to print from said edge of said receiver media from the supply roll up to the six o'clock position.

36. The method according to Claim 34 wherein said translating step further includes the step of causing said printhead carriage to print from said edge of said receiver media from the supply roll up to the three o'clock position.

37. The method according to Claim 34 wherein said translating step further includes the step of causing said printhead carriage to print from said edge of said receiver media from the supply roll up to the twelve o'clock position.

38. The method according to Claim 27 wherein said cutting step is preceded by the step of deactivating said rotary drum.

~~39. The method according to Claim 38 wherein said deactivating step is followed by the step of rotating said rotary drum to a desired cutting position.~~

40. The method according to Claim 39 wherein said rotating step is followed by the step of causing a retractable cutter blade to come in contact with said receiver media on said rotary drum by running against said cutter notches on said outer surface.

41. The method according to Claim 27 wherein said cutting step is followed by the step of rotating said rotary drum counter-clockwise.

42. The method according to Claim 41 wherein said step of rotating said rotary drum counter-clockwise further includes the step of pushing the cut receiver media out of its original path and onto the path of a stripper/in-feed guide.

43. The method according to Claim 27 wherein said step of causing said cut receiver media to exit a receiver media path is followed by the step of causing said rotary drum to return to a paper feed position for the next cycle.

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